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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/533,399

12/05/2005

Hans-Dieter Wiek

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05/31/2006

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EXAMINER

DOE, GRACE SC

ART UNIT

PAPER NUMBER

3732

DATE MAILED: 05/31/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/533,399	<b>Applicant(s)</b> WIEK ET AL.	
	<b>Examiner</b> Grace SC Doe	<b>Art Unit</b> 3732	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 25 April 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>4/25/05</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Information Disclosure Statement***

1. The references listed in Applicant's information disclosure statement filed on 4/25/05 is acknowledged and in compliance with 37 CFR 1.97 and 1.98.

### ***Priority***

2. Acknowledgment is made of applicant's claim for priority under 35 U.S.C. 371.

### ***Specification***

3. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

### ***Claim Objections***

4. Claim 12 is objected to because of the following informalities: replace "an" with "can". Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claims 1-2 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. With respect to claim 2, the term "continuously" is inadequately supported by the specification. Applicant's specification and drawing indicating a continuous taper is illustrated in the figures as a stepped taper.

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 10-12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. With respect to claims 10-12, the term "the delivery line section" is vague. It is uncertain whether Applicant is referring to the first or second delivery line. There is insufficient antecedent basis for this limitation in the claim.

9. Claim 13 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 13 does not depend from a preceding claim. For purposes of this Action, it is assumed Applicant intended claim 13 to depend from claim

Art Unit: 3732

1 rather than claim 15. Additionally, "the closure" lacks sufficient antecedent basis for this limitation in the claim; rephrase as "a closure."

***Claim Rejections - 35 USC § 102***

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

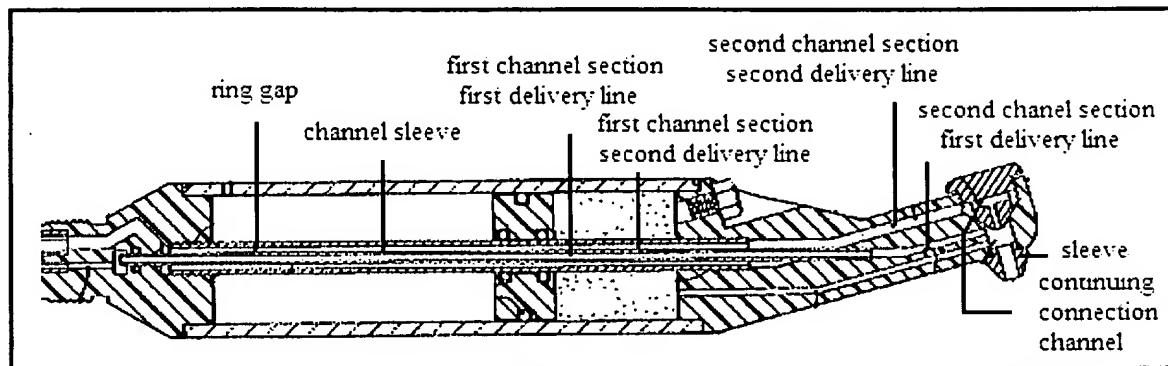
A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

11. Claims 1, 11, and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Meller (US 4,776,794). Meller discloses a dental handpiece having a foot (See fig. 6, part 214), shaft (See fig. 6, part 212), outlet nozzle (See fig. 6, part 258), first delivery line (See fig. 6, part 250) having a first channel (See below) and second channel (See below), second delivery line (See fig. 6, part 268) having a first channel (See below) and second channel (See below), and ring nozzle surrounding the second channel (See fig. 6, part 256; col. 9, lines 12-22). A ring gap (See below) surrounds the channel sleeve (See below) of the first channel of the second delivery line and connects to the ring gap through a continuing connection channel (See below). As to claim 11, Meller further discloses that the delivery lines are capable of being accessed from the rear (See fig. 6, part 220 & 224). As to claim 13, a closure part (See fig. 6, part 214) is capable of being releasably connected with the cannula from the rear. As to claim 14, Meller discloses an

Art Unit: 3732

outlet nozzle (See fig. 6, part 258) including a ring nozzle sunken in an annex of the cannula (See fig. 6, part 256) and a sleeve surrounding the nozzle (See below).



### ***Claim Rejections - 35 USC § 103***

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. Claims 2-3, 5, 7-10, 12, and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Meller (US 4,776,794). Meller, discussed above, fails to expressly disclose a tapered channel sleeve. It would be an obvious matter of choice to one of ordinary skill in the art at the time of the invention to taper the gap sleeve so as to facilitate insertion of a delivery line through a larger access inlet and conserve space within the dental handpiece. Meller also fails to disclose a valve. Another dental handpiece embodiment discloses a valve (See fig. 10, part 370) capable of preventing back flow located in a mid region of the cannula (See fig. 10, part 370). As to claim 7,

Art Unit: 3732

the valve has a rearward recess (See fig. 10A, parts 368, 348, & 350) and is capable of being accessed from the rear. It should be noted that the term "accessible" is broad and the fact that water can flow through the valve constitutes accessible. As to claims 8-9, Meller fails to expressly disclose a transverse channel. It would be an obvious matter of choice to one of ordinary skill in the art at the time of the invention to include a transverse channel for purposes of maximizing space within the dental handpiece and accommodating the other parts of the dental handpiece. Further, it would be an obvious matter of choice to situate a delivery line forward of the transverse channel in order to maximize space within the dental handpiece. As to claim 10, the valve is arranged in the delivery line (See figs. 10A & 10B). As to claim 12, the valve is capable of being introduced and exchanged from the rear (See fig. 8, part 370). As to claim 15, a closure part (See fig. 10A, parts 374 & 372) is capable of closing the recess. Therefore it would be obvious to one of ordinary skill in the art at the time of the invention to modify the handpiece of Meller with the valve feature of another Meller embodiment in order to adjust the degree of flow (See col. 6, line 41).

14. Claims 4 and 6-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Meller (US 4,776,794) in view of Jenkins (US 5,542,845). Meller, discussed above, fails to expressly disclose a valve. Jenkins discloses a membrane valve (See fig. 4), membrane is elastically bent out (See fig. 3), with an axially fixed outer edge (See fig. 3, parts 64 & 66) and an inner edge forming a seal with a ring surface (See fig. 3, parts 50 & 42). The valve has a rearward recess (See fig. 4, inlet area) capable of being

Art Unit: 3732

accessed. Therefore it would be obvious to one of ordinary skill in the art at the time of the invention to modify the handpiece of Meller with the valve of Jenkins in order to increase resistance to back flow leakage (See col. 3, lines 13-15) and facilitate valve engagement and disengagement (See col. 3, lines 17-24).

15. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Meller (US 4,776,794) in view of Johnston (US 5,961,326). Meller, discussed above, fails to disclose a quick connect. Johnston discloses a closure member connected to the cannula by a quick-fastening connection (See col. 3, lines 7-9) in order to facilitate installation of a fluid line. Therefore it would be obvious to one of ordinary skill in the art at the time of the invention to modify the dental handpiece of Meller with the connection of Johnston in order to facilitate installation of a fluid line.

### ***Conclusion***

16. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

A. Bailey (US 5,090,904) discloses a dental polisher having a foot, delivery line, nozzle, and tapered gap ring.



Art Unit: 3732

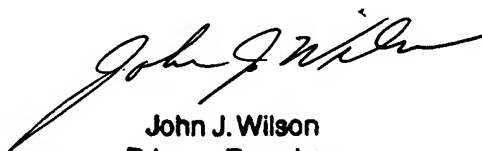
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Grace SC Doe whose telephone number is (571) 272-2831. The examiner can normally be reached on 8:00am - 6:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patricia Bianco can be reached on (571) 272-4940. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



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